

REMARKS

Claims 23-44 remain in this application. Claims 23, 26, 30-31, 33, 38-39, and 41-43 are currently amended to further clarify the intended subject matter, correct antecedent basis, and for matters of form. No new matter has been added.

In response to the restriction requirement, Applicants provisionally elect, with traverse, Group IX, wherein the specified agent is GR24 and the specified fungus is *Gigaspora rosea*. The reasons for traverse are as follows.

The Office Action holds the position that the technical feature linking the claims of Groups I-XLVIII is an arbuscular mycorrhizal (AM) fungi, a host, and a chemical agent. Applicants respectfully disagree with this position. The technical feature linking the groups is instead the property of stimulating the development and growth of an arbuscular mycorrhizal fungus (see, page 1, lines 6-8 of the specification). The resulting stimulation results in mycorrhization, i.e., the establishment of a symbiosis between a plant and mycorrhizal fungi, and the development of plants that are valuable in agronomy and/or forestry.

The claims of Group I-XVI, Group XVII-XXIV, Group XXV-XXXII, and Group XXXIII-XLVIII all feature a chemical agent selected from a group of strigolactone compounds that share a

common structure, in addition to the unifying common functional property.

Annex B of the Administrative Instructions under the Patent Cooperation Treaty, provides details for determining unity of invention under PCT Rule 13.2. In particular, paragraph (f) illustrates the rules governing Markush practice. The Instructions state, "In this special situation, the requirement of a technical interrelationship and the same or corresponding special technical features as defined in Rule 13.2, shall be considered to be met when the alternatives are of a similar nature."

Of relevance to the present application, the Instructions further state, "(i) When the Markush grouping is for alternatives of chemical compounds, they shall be regarded as being of a similar nature where the following criteria are fulfilled:

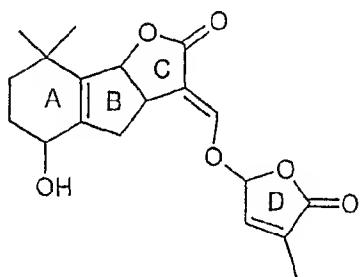
(A) all alternatives have a common property or activity, and

(B) (1) a common structure is present, i.e., a significant structural element is shared by all of the alternatives.

Furthermore, the Instructions state "the words 'significant structural element is shared by all of the alternatives' refer to cases where the compounds share a common

chemical structure which occupies a large portion of their structures, or in case the compounds have in common only a small portion of their structures, the commonly shared structure constitutes a structurally distinctive portion in view of existing prior art, and the common structure is essential to the common property or activity. The structural element may be a single component or a combination of individual components linked together."

The stimulating agent suitable for stimulating the development and/or growth of the AM fungi is a strigolactone molecule, and all of the agents featured in the claims share the following structural element:



(see, page 8, lines 8-19). This structural element is shared by all of the alternatives, i.e., GR24, GR7, Nijmegen-1, demethylsorgolactone, strigol, alectrol, sorgolactone, and orobanchol, and the common structure is essential to the common property or activity of the stimulating agent. The stimulating agent can be extended to the entire family of strigolactones, of which the specific few strigolactones recited in the claims are representative.

In addition, the claims of Groups I-XVI, XVII-XXIV, XXV-XXXII, and XXXIII-XLVIII all relate to Arbuscular mychorrhizal (AM) fungi and are not restricted to only *Gigaspora rosea* or *Glomus intraradices*. These two AM fungi are representative of the group of AM fungi. Because similar responses are obtained with these two fungi this provides a good indication that all AM fungi would respond similarly to the strigolactone compounds.

Furthermore, as stated in Annex B, "Unity of invention has to be considered in the first place only in relation to the independent claims in an international application and not the dependent claims" (emphasis added). Instant claim 30 depends from claim 23, and features the specific AM fungi. Similarly, claim 42 depends from claim 41. Thus, the Office Action incorrectly applies a restriction requirement to the group of AM fungi.

In view of the above remarks, Applicants submit that the Office Action fails to satisfy its burden in showing that unity of invention does not exist for claims 23-44. Accordingly, Applicants respectfully request the search and examination of all the claims in their full scope.

Entry of the above amendments is earnestly solicited. An early and favorable first action on the merits is earnestly requested.

Should there be any matters that need to be resolved in the present application the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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